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US-08-901-346-1
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Sequence 8, Appli	Sequence 11, Appl	Sequence 1, Appli	Sequence 9, Appli	Sequence 12, Appl	Sequence 3, Appli	Sequence 2, Appli	Sequence 12, Appl	•	Sequence 16, Appl	Sequence 16, Appl	•	Sequence 15, Appl	Sequence 10, Appl	Sequence 6, Appli	Sequence 3, Appli	Sequence 3, Appli	Patent No. 5453363

ALIGNMENTS

Sequence 3, Application US/08106433A Patent No. 5385834 GENERAL INFORMATION: TELECOMMUNICATION INFORMATION: TELEPHONE: 404-875-8817 TELEPAX: 404-875-9505 INFORMATION FOR SEQ ID NO: 3: SEQUENCE CHARACTERISTICS: APPLICATION NUMBER: No. 5385834 Applicable FILING DATE: No. 5385834 Applicable ATTORNEY/AGENT INFORMATION: COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, CORRESPONDENCE ADDRESS: ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222) TITLE OF INVENTION: Exhibiting Altered Promoter Recognition NUMBER OF SEQUENCES: 23 CURRENT APPLICATION DATA: PRIOR APPLICATION DATA: STATE: G COUNTRY: NAME: Deveau, Colton, and Marquis NAME: Colton, Laurence P. REGISTRATION NUMBER: Reg. No. 538 COMPUTER: Apple Macintosh OPERATING SYSTEM: Mcintosh 7.1 SOFTWARE: Microsoft Word 5.1 TYPE: nucleic acid KEGISTRATION NUMBER: Reg. No. 5385834 33,371 REFERENCE/DOCKET NUMBER: 10733-161 APPLICATION NUMBER: US FILING DATE: 08/13/93 CLASSIFICATION: 435 COMPUTER: CITY: Atlanta INFORMATION: CANT: Richard A. 30309 Georgia 1360 Peachtree St., NE USA Ikeda US/08/106,433A 3.50 inch, 1.4 Mb Storage

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AUTHORS: Brosius, J. and Lupski, J.
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RELEVANT RESIDUES I
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                                                                                                                                                                                                        aagcaacggcccggagggtggcgggcaggacgcccgccataaactgccaggcatcaaatt 1566
                                                                                                                                                                                                                                                       TTGTCGGTGAACGCTCTCCTGAGTAGGACAAATCCGCCGGGAGCGGATTTGAACGTTGCG
                                                                                                                                                                                                                                                                   ttgtcggtgaacgctctcctgagtaggacaaatccgccgggagcggatttgaacgttgcg
                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAATTTGCCTGGCGGCAGTAGCGCGGTGGTCCCACCTGACCCCATGCCGAACTCAGAAG
                                                              ATATCTACAAGCCATCCCCCCACAGATACGGTAAACTAGCCTCGTTTTTGCATCAGGAAA 1656
                                                                                                                            AAGCAGAAGGCCATCCTGACGGATGGCCTTTTTGCGTTTCTACAAACTCTTCCTGTCGTC
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96.5%;
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Pred. No. 8.9e-91;
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US-08-106-433A-4
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                                                                                                                                                                                                                                                                                                                     ORGANISM: No. 5385834 applicable
STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: PCM-X#
CLONE: PCM-X#
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marquis
NAME: Deveau, Colton, and Marquis
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
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TELEPHONE: 404-875-8817
TELEPHONE: 404-875-8505
TELEPHONE: 404-875-8505
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
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MOLECULE TYPE: other nucleic acid
HYPOTHETICAL: NO
ANVI-SENSE: NO
FRAGMENT TYPE: NO. 5385834 applicable
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: Apple Macintosh
OPERATING SYSTEM: MCINTOSh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                     LIBRARY: No. 5385834 applicable
CLONE: pcM-x*
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
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TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
                                                                                                                                                                                                     FEATURE:
                                                                                             NAME/KEY:
NAME/KEY:
NAME/KEY:
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OTHER INFORMATION: If BLICATION INFORMATION:
                                            LOCATION: 198 to 220 IDENTIFICATION METHOD:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: double
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                                                                                                                                                 Potential T7 promoter located between nucleotides 198 and 220 and in front of
                                                                                                                          promoterless
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R: 10733-161
                       the
                    The general clone was constructed from pKK232-8 and the potential T7 promoter between positions 198 and
                                                                                                                          chloramphicol acetyl transferase
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                                                                                                                                                                           Sequence 5, Application US/08106433A Patent No. 5385834
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Matches 413; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                              GENERAL INFORMATION:
                                                                                APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T
TITLE OF INVENTION: Exhibiti
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                      1671
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COUNTRY:
                             ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, STREET: 1360 Peachtree St., NE CITY: Atlanta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATE: Sept. 7, DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PUBLICATION DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS:
                                                                                                                                                                                                                                                                                  gcagctat 1694
                                                                                                                                                                                                                                                                                                                                             atatctacaagccatcccccccacagatacggtaaactagcctcgtttttgcatcaggaaa
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                                                                                                                                                                                                                                                                                                                               ATATCTACAAGCCATCCCCCCACAGATACGGTAAACTAGCCTCGTTTTTGCATCAGGAAA
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Georgia
Y: USA
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Selection and Characterization of a Mutant T7
RNA Polymerase that Recognizes an Expanded Range
of T7-like Promoters
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                                                                                                    Mutant T7 RNA Polymerase GP1(Lys222) Exhibiting Altered Promoter Recognition 23
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96.5%;
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Pred. No. 8.9e-91;
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NO:
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US-08-106-433A-5
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TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 5
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                  IDENTIFICATION METHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was OTHER INFORMATION: The T7 promoter between positions 198 and 22C PUBLICATION INFORMATION:
AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S. TITLE: Selection and Characterization of a Mutant T7 TITLE: RNA Polymerase that Recognizes an Expanded Range
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
CLONE: PCAT10-1
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGIA TYPE: ot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: No. 5385834 Applicable FILING DATE: No. 5385834 Applicable ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRAGMENT TYPE: No. 5385834 applicable ORIGINAL SOURCE:
ORGANISM: No. 5385834 applicable
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NAME/KEY:
NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLATE: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
                                                                                                                                                                                                      VOLUME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Deveau, Colton, and NAME: Colton, Laurence P. REGISTRATION NUMBER: Reg.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 0
CLASSIFICATION:
                                                      PUBLICATION DATE:
DOCUMENT NUMBER:
FILING DATE:
                                                                                                                     DOCUMENT NUMBER: FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: Apple Macintosh
               PUBLICATION DATE:
RELEVANT RESIDUES
                                                                                                                                                                                PAGES:
                                                                                                                                                                                                                                             JOURNAL:
                                                                                                                                                              Sept.
                                                                                                                                                              9115-9124
Sept. 7, 19
                                                                                                                                                                                                                                                                   RNA Polymerase that of T7-like Promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Deveau, Colton, and Marquis
                                                                                                                                                                                                                                                 Biochemistry
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                                                                                                                                                                                                                                                                                                                                                                                                                                      chloramphicol acetyl transferase 198 to 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T7 promoter f10 located between nucleotides 198 and 220 and in front of a promoterless
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                 SEQ
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ER: 10733-161
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US-08-106-433A-6
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Best Local Similarity
Matches 413; Conserv
          FILING DATE: 08/13/93
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
AMME: Deveau, Colton, and Marquis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFEBENCE/DOCKET NUMBER: 10733-161
                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.
COMPUTER: Apple MacIntosh
OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106,433A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Richar
                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Exhibiting NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, an STREET: Two Midtown Plaza, Su STREET: 1360 Peachtree St., N CITY: Atlanta
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TELECOMMUNICATION INFORMATION:
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Exhibiting Altered Promoter Recognition
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96.5%;
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Pred. No. 8.
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Best Local (
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TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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LOCATION: 198 to 220
IDENTIFICATION METHOD:
IDENTIFICATION METHOD:
OTHER INFORMATION: If t
PUBLICATION INFORMATION:
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FRAGMENT TYPE: NO. ...
ORIGINAL SOURCE:
ORGANISM: No. 5385834 applicable
CRESSES APPLICABLE
CRESSES ARSESSA
                                                                                                                                                                                LIBRARY: No. 5385834 applicable
CLONE: pCM-T297
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
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                                                                                                                                                                                                                                                                                                                                                                                                          DATE: Sept. 7,
DOCUMENT NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana TITLE: Selection and Characterization of a Mutant TITLE: RNA Polymerase that Recognizes an Expanded TITLE: of T7-like Promoters
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                                                                                                                                                                                                                                                                                                                                                                              PUBLICATION DATE: DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ISSUE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL: Biochemistry VOLUME: 32
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tgaaacgccgtagcgccgatggtagtgtggggtctcccccatgcgagagtaggggaactgcc 1386
                                                        Similarity
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Sept. 7, 1993
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Pred. No. 8.
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between positions 198 and 220
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: Sequence 7, Application US/08106433A 
: Patent No. 5385834
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INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
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MEDIUM TYPE: Diskette, 3.50 inch, 1.4
COMPUTER: Apple MacIntosh
OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                       ANTI-SENDL.
FRAGMENT TYPE: NO. __
PRAGMENT TYPE: NO. __
ORIGINAL SOURCE:
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APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 08/13/CLASSIFICATION: 435
                                                                          STRAIN: No. 5385834 applicable INDIVIDUAL ISOLATE: No. 5385834 applicable DEVELOPMENTAL STAGE: No. 5385834 applicable HAPLOTYPE: No. 5385834 applicable TISSUE TYPE: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Deveau, Colton, and Marquis NAME: Colton, Laurence P. REGISTRATION NUMBER: REG. NO. 5385 REFERENCE/DOCKET NUMBER: 10733-161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, STREET: 1360 Peachtree St., NE
                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
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STATE: Georgia
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                                                      TYPE:
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.: No. 5385834 applicable
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Exhibiting Altered Promoter Recognit
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Best Local Similarity
Matches 413; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLONE: pCM-P1160
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATE: Sept. 7, 19
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANELLE: NO.
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IDENTIFICATION ETHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was sequenced. OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
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PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID
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GCAGCTGT
                              gcagctat 1694
                                                                          atatctacaagccatccccccacagatacggtaaactagcctcgtttttgcatcaggaaa
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Sept. 7, 1993
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Pred. No. 8.9e-91;
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RESULT 6 US-08-106-433A-8

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Sequence 8, Patent No.
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TELEPHONE: 404-875-8817
TELEPAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
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TITLE OF INVENTION: M
TITLE OF INVENTION: F
NUMBER OF SEQUENCES:
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STREET: Two Midtown Plaza, Su
STREET: 1360 Peachtree St., N
CITY: Atlanta
STATE: Georgia
                                                                                                                                                                                                                                                                                                               UNITS: NO. FEATURE:
NAME/KEY: I
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NAME: Deveau, Colton, and Marquis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 Applicable
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ANTI-SENSE: NO
FRAGMENT TYPE: NO. 5385834 applicable
ORIGINAL SOURCE:
ORGANISM: NO. 5385834 applicable
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: N
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MEDIUM TYPE: Diskette, 3.:
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosl
SOFTWARE: Microsoft Word '
                                                                                                                  PUBLICATION INFORMATION: AUTHORS: Ikeda, R.A.,
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CLONE: pcM-T270
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
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                                                                                                                                                                                    NAME/KEY: Inactive T7 f10 promoter mutant (-9C to A) located between nucle LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
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TYPE: nucleic acid
STRANDEDNESS: double
                                    TITLE:
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INDIVIDUAL ISOLATE: NO. 5385834 applicable
DEVELOPMENTAL STAGE: NO. 5385834 applicable
HAPLOTYPE: NO. 5385834 applicable
TISSUE TYPE: NO. 5385834 applicable
CELL TYPE: NO. 5385834 applicable
ORGANELLE: NO. 5385834 applicable
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Selection and Characterization of a Mutant T7 RNA Polymerase that Recognizes an Expanded Range of T7-like Promoters
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Mutant T7 RNA Polymerase GP1(Lys222)
Exhibiting Altered Promoter Recognition
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Suite 1400,
                                                                             and Warshamana, G.S.
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Best Local S
Matches 413
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  COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.:
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosi
SOFTWARE: Microsoft Word:
                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, and Marquis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
                                                                                                                                                                                             APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognit
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                                                                                                   CITY: Atlanta
STATE: Georgia
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nes 413; Conserv
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PUBLICATION DATE:
RELEVANT RESIDUES
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DATE:
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                                                                                      COUNTRY:
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                                                                                                    Georgia
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Sept. 7, 1993
                                                                                       USA
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SYSTEM: Mcintosh 7.1 Microsoft Word 5.1
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Pred. No. 8.9e-91;
0; Mismatches 15
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CURRENT APPLICATION DATA:

US/08/106,433A

APPLICATION NUMBER: UFILING DATE: 08/13/93 CLASSIFICATION: 435

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                                                              Best Local Similarity Matches 413; Conserv
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AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S.
TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ANTI-SENSE: NO. 5385834 applicable
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1267 agagtcgacctgcaggcatgcaagcttgggtcccacctgaccccatgccgaactcagaag 1326
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LIBRARY: No. 5
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                                                                                                                                                                                                                                                                                                               PAGES: 9115-9124
DATE: Sept. 7, 19
DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IDENTIFICATION METHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was OTHER INFORMATION: If the mutant T7 promoter between positions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE TYPE: No. 5385834 applicable CELL TYPE: No. 5385834 applicable ORGANELLE: No. 5385834 applicable
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                                                                                                                                                                                 FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO:
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nucleic acid
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pCM-P1087
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96.5%;
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                                                              Score 404; DB 1;
Pred. No. 8.9e-91;
0; Mismatches 15
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RESULT 8
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                                                          TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO:
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                                                                                                                                       APPLICATION NUMBER: No. 5385834 Applicable FILING DATE: No. 5385834 Applicable ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                     COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosh 7
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
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MEDIUM TYPE: Diskette,
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                                        SEQUENCE CHARACTERISTICS:
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                                                                                                                           NAME: Deveau, Colton, and
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg
REFERENCE/DOCKET NUMBER: 1
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STATE: Georgia
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                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US FILING DATE: 08/13/93
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5110 base pairs
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                                                                                                                                   Reg. No. 5385834 33,371
ER: 10733-161
                                                                                                                                                                                                                                                                                                                                                                                                                3.50 inch, 1.4 Mb Storage
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ANTI-SENSE: NO
ANTI-SENSE: NO. 5385834 applicable
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AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana.
TITLE: Selection and Characterization of a Mutant
TITLE: RNA POLymerase that Recognizes an Expanded
TITLE: of T7-like Promoters
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PUBLICATION DATE:
DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN: No. 5385834 applicable INDIVIDUAL ISOLATE: No. 5385834 applicable DEVELOPMENTAL STAGE: No. 5385834 applicable
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les 413; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
aagcagaaggccatcctgacggattggcctttttgcgttttctacaaaactctttcctgtcgtc
                                                                                                                  AAGCAACGGCCCGGAGGGTGGCGGGCAGGACGCCCGCCATAAACTGCCAGGCATCAAATT
                                                                    TGAAACGCCGTAGCGCCGATGGTAGTGTGGGGTCTCCCCATGCGAGAGTAGGGAACTGCC
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Sept. 7, 1993
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                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 8.9e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             Score 404; DB 1; Length 5110; Pred. No. 8.9e-91;
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ion of a Mutant T7
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198 and 220 is
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US-08-106-433A-11 ; Sequence 11, Application ; Patent No. 5385834
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TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                           HYPOTHETICAL: NO ANTI-SENSE: NO FRAGMENT TYPE: NO ORIGINAL SOURCE:
                                     LIBRARY: NO. 538
CLONE: PCM-T286
POSITION IN GENOME:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: NO. 5385834 Applicable ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
PRIOR APPLICATION NUMBER: No. 5385834 Applicable
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                                                                               LIBRARY: NO. 5
                                                                                                                      HAPLOTYPE: No. 5385834 applicable TISSUE TYPE: No. 5385834 applicable CELL TYPE: No. 5385834 applicable ORGANELLE: No. 5385834 applicable
                                                                                                                                                                                                        STRAIN: No. 5385834 applicable INDIVIDUAL ISOLATE: No. 5385834 applicable DEVELOPMENTAL STAGE: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Deveau, Colton, and Marquis NAME: Colton, Laurence P. REGISTRATION NUMBER: Reg. No. 5385834 33,371 REFERENCE/DOCKET NUMBER: 10733-161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Diskette, 3.1
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosh
OPERATING SYSTEM: Mcintosh
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ZIP: 30309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, STREET: 1360 Peachtree St., NE
CHROMOSOME/SEGMENT: MAP POSITION: No.
                                                                                                                                                                                                                                                                          ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
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MENT: No. 5385834 applicable No. 5385834 applicable
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Matches
                 Sequence 12, Application US/08106433A Patent No. 5385834
GENERAL INFORMATION:
APPLICANT: Richard A. Ikeda
TITLE OF INVENTION: Mutant T7 RNA
TITLE OF INVENTION: Exhibiting Al-
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                                                                                                                                                                                        1671 GCAGCTGT 1678
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AUTHORS: Ikeda, R.A.,
   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAGES: 9115-9124
DATE: Sept. 7, 19
DOCUMENT NUMBER:
FILING DATE:
PUBLICATION DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from
IDENTIFICATION METHOD: pKK332-8 and the inserted "promoter" was sequenced.
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
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nes 413; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE: Selection and Characterization of a Mutant T7
TITLE: RNA Polymerase that Recognizes an Expanded Range
TITLE: of T7-like Promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISSUE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22.5%;
96.5%;
Mutant T7 RNA Polymerase GP1(Lys222)
Exhibiting Altered Promoter Recognition
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TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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FRACMENT TYPE: NO. J.
FRACMENT TYPE: NO. J.
ORIGINAL SOURCE:
ORGANISM: NO. 5385834 applicable
ORGANISM: NO. 5385834 applicable
ORGANISM: NO. 5385834 applicable
C198834
                                                                                                                                                                                                                                                                                                                                                                                                        UNITS:
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OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: No. 5385834 Applicable FILING DATE: No. 5385834 Applicable ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                   OTHER INFORMATION: The PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLONE: pcm-B64
POSITION IN GENOME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMEDIATE SOURCE:
                  PAGES: 9115-9124
DATE: Sept. 7, 19
DOCUMENT NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN: No. 5385834 applicable IMDIVIDUAL ISOLATE: No. 5385834 applicable DEVELOPMENTAL STAGE: No. 5385834 applicable HAPLOTYPE: No. 5385834 applicable TISSUE TYPE: No. 5385834 applicable CELL TYPE: No. 5385834 applicable ORGANELLE: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, STREET: 1360 Peachtree St., NE
                                                                                                                                                                      TITLE: Selection and Characterization of a Mutant TITLE: RNA Polymerase that Recognizes an Expanded TITLE: of T7-like Promoters
                                                                                                                                                                                                                                                                                                        NAME/KEY: Intermediate T7 f10 promoter mutant (-8 LOCATION: 198 to 220 IDENTIFICATION METHOD: The clone was constructed IDENTIFICATION METHOD: pKK232-8 and the inserted
                                                                                                                                                                                                                                                                                                                                                                                                                      CHROMOSOME/SEGMENT: No. 5385834 applicable MAP POSITION: No. 5385834 applicable UNITS: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: double TOPOLOGY: circular
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STATE: Georgia
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                                                                                                                              VOLUME:
                                                                                                                                                                                                                                                AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LIBRARY:
                                                                                                                                                     JOURNAL:
PUBLICATION DATE:
                                                                                                           ISSUE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30309
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                                                                                                                                                       Biochemistry
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5385834 applicable
                                                                 1993
                                                                                                                                                                                                                                                                                      OD: pKK232-8 and the inserted "promoter" The mutant T7 promoter between positions
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BER: 10733-161
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                                                                                                                                                                                                                                                                          from "promoter" was sequenced no positions 198 and 220 in
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between

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; DOCUMENT NUMBER:
; FILING DATE:
; PUBLICATION DATE:
; RELEVANT RESIDUES IN SEQ ID
US-08-106-433A-12
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Best Local Similarity
Matches 413; Conser
                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106,433A
FILING DATE: 08/13/93
CLASSIFICATION: 435
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                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Deveau, Colton, and Marquis
STREET: Two Midtown Plaza, Suite 1400,
STREET: 1360 Peachtree St., NE
                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                             CITY: Atlanta
STATE: Georgia
COUNTRY: USA
 APPLICATION NUMBER: No. 5385834
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Exhibiting Altered Promoter Recognit
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5385834 Applicable
4 Applicable
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STRAIN: No. 5385834 applicable
INDIVIDUAL ISOLAME: No. 5385834 applicable
DEVELOPMENTAL STAGE: No. 5385834 applicable
HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
LIBRARY: No. 5385834 applicable
LIBRARY: No. 5385834 applicable
ORGANELE: No. 5385834 applicable
ORGANELE: No. 5385834 applicable
ORGANELE: No. 5385834 applicable
ORGANELE: No. 5385834 applicable
                                                                                                                                                                                                                                 Query Match 22.5
Best Local Similarity 96.5
Matches 413; Conservative
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: Inactive T7 f10 promoter mutant (-7C to G) located between nucle LOCATION: 198 to 220
IDENTIFICATION METHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was sequenced. OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220 PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MULEUCE. NO
HYPOTHETICAL: NO
ANTI-SENSE: NO
THE TYPE: NO. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLONE: pcm-p1208
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
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                                                                                                                                          1251 AGAATTTGCCTGGCGGCAGTAGCGCGGTGGTCCCACCTGACCCCATGCCGAACTCAGAAG 1310
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                                                                                                                                                                                                                                                                                                                                                                                                                       DOCUMENT NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBLICATION DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ISSUE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VOLUME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOCUMENT NUMBER:
                                                                                                                                                                agagtcgacctgcaggcatgcaagcttgggtcccacctgaccccatgccgaactcagaag 1326
aggcatcaaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgttgt 1446
                                                                       tgaaacgccgtagcgccgatggtagtgtgggggtctcccccatgcgagagtaggggaactgcc 1386
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9115-9124
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Colton, Laurence P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S: Ikeda, R.A., Chang, L.L., and Warshamana, G.S. Selection and Characterization of a Mutant T7 RNA Polymerase that Recognizes an Expanded Range of T7-like Promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5110 base pairs
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ER: 10733-161
                                                                                                                                                                                                                                 Score 404; DB 1; Length 5110; Pred. No. 8.9e-91; 0; Mismatches 15; Indels
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US-08-106-433A-14
                                                                                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storagy
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/106,433A
FILING DATE: 08/13/93
CLASSIFICATION E435
PRIOR APPLICATION NUMBER: No. 5385834 Applicable
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
APPLICATION NUMBER: No. 5385834 Applicable
APPLICATION NUMBER: No. 5385834 Applicable
FILING DATE: No. 5385834 Applicable
APPLICATION NUMBER: No. 5385834 Applicable
AFFORMEY/AGENT INFORMATION:
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
TELECOMMUNICATION INFORMATION:
TELEPAX: 404-875-8807
TELEPAX: 404-875-8807
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                      TELEFAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
SEQUENCE SILO base pairs
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          ANTI-SENSE: NO FRAGMENT TYPE: NO. ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                              MOLECULE TYPE: of HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Deveau, Colton, and Marquis STREET: Two Midtown Plaza, Suite 1400, STREET: 1360 Peachtree St., NE CITY: Atlanta STATE: Georgia COUNTRY: USA
                                                                                               TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
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                                                                               other nucleic acid
5385834 applicable
                                5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.50 inch, 1.4 Mb Storage
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Best Local
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 gcagctat 1694
                                                   atatctacaagccatccccccacagatacggtaaactagcctcgtttttgcatcaggaaa
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; PUBLICATION DATE: ; RELEVANT RESIDUES US-08-106-433A-14
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HAPLOTYPE: No. 5385834 applicable
TISSUE TYPE: No. 5385834 applicable
CELL TYPE: No. 5385834 applicable
ORGANELLE: No. 5385834 applicable
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PUBLICATION INFORMATION: AUTHORS: Ikeda, R.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LIBRARY: No. 5385834 applicable
CLONE: pCM-P1031
POSITION IN GENOME:
CHROMOSOME/SEGMENT: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                  1267 agagtcgacctgcaggcatgcaagcttgggtcccacctgaccccatgccgaactcagaag 1326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOCUMENT NUMBER: FILING DATE: PUBLICATION DATE: DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: Inactive T7 f10 promoter mutant (-7C to A) located between nucle LOCATION: 198 to 220 IDENTIFICATION METHOD: The clone was constructed from LDENTIFICATION METHOD: pKK233-8 and the inserted "promoter" was sequenced. OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN: No. 5385834 applicable INDIVIDUAL ISOLATE: No. 5385834 applicable DEVELOPMENTAL STAGE: No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE: of T7-like Promoters
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AAGCAGAAGGCCATCCTGACGGATGGCCTTTTTGCGTTTCTACAAACTCTTCCTGTCGTC
                  aagcagaaggccatcctgacggatggcctttttgcgtttctacaaactcttcctgtcgtc
                                                                             AAGCAACGGCCCGGAGGGTGGCGGGGCAGGACGCCCGCCATAAACTGCCAGGCATCAAATT
                                                                                                aagcaacggcccggagggtggcgggcaggacgcccgccataaactgccaggcatcaaatt 1566
                                                                                                                                                                                                                                          AGGCATCAAATAAAACGAAAGGCTCAGTCGAAAGACTGGGCCTTTCGTTTATCTGTTGT
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Sept. 7, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No. 5385834 applicable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Selection and Characterization of a Mutant T7 RNA Polymerase that Recognizes an Expanded Range
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 404; DB Pred. No. 8.9e 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; I
8.9e-91;
hes 15;
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RESULT 13
US-08-106-433A-15
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TELEPHONE: 404-875-8817
TELEPAX: 404-875-8505
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 5110 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: other nucleic ac
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MEDIUM TYPE: Diskette, 3.50 in
COMPUTER: Apple macintosh
OPERATING SYSTEM: Mcintosh 7.1
SOFTWARE: Microsoft Word 5.1
CURRENT APPLICATION DATA:
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FRACMENT TYPE: NO. 5385834 Applicable
CORIGINAL SOURCE:
ORIGINAL SOURCE:
ORIGINAL SOURCE:
CORRESPONDENT OF THE PROPERTY OF THE PRO
                                                                                                                                                                                                                     UNITS:
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HYPOTHETICAL: NO
ANTI-SENSE: NO
TYPE: NO. 5385834 applicable
                                                                                                                                                                                                                                           CLONE: PCM-T221
POSITION IN GENOME: No. 5385834 applicable
MAP POSITION: No. 5385834 applicable
UNITS: No. 5385834 applicable
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ATTORNEY/AGENT INFORMATION:
NAME: Deveau, Colton, and Marquis
NAME: Colton, Laurence P.
REGISTRATION NUMBER: Reg. No. 5385834 33,371
REFERENCE/DOCKET NUMBER: 10733-161
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FILING DATE: 08/13/93
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: No. 5385834 Applicable
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INDIVIDUAL ISOLATE: NO. 5385834 applicable
DEVELOPMENTAL STAGE: NO. 5385834 applicable
HAPLOTYPE: NO. 5385834 applicable
TISSUE TYPE: NO. 5385834 applicable
CELL TYPE: NO. 5385834 applicable
CELL TYPE: NO. 5385834 applicable
ORGANELLE: NO. 5385834 applicable
ORGANELLE: NO. 5385834 applicable
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NAME/KEY: Intermediate T7 f10 promoter mutant (-6A to LOCATION: 198 to 220 IDENTIFICATION METHOD: The clone was constructed from IDENTIFICATION METHOD: pKK232-8 and the inserted "promother INFORMATION: The mutant T7 promoter between bosi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIBRARY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30309
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Exhibiting Altered Promoter Recognit:
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    The clone was constructed from pKK232-8 and the inserted "promoter" mutant T7 promoter between positions
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                                                                                                                                                     Sequence 2 Patent No.
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Best Local Similarity
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                                                                                                                                          GENERAL INFORMATION:
                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                      APPLICANT: Shaw, Anita J.

APPLICANT: Altaras, Nedim E.

TITLE OF INVENTION: MICROBIAL PRODUCTION OF 1,2-PROPANEDIOL
TITLE OF INVENTION: FROM SUGAR
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                                                NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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          STREET:
CITY: M
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DATE: Sept. 7, 1993
DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, TITLE: Selection and Characterization of a Mutant of TITLE: RAA Polymerase that Recognizes an Expanded TITLE: of T7-like Promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PUBLICATION DATE: RELEVANT RESIDUES
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                                     ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PUBLICATION DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISSUE:
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                                                                                                                                                     , Application US/08801344 6087140
Madison
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                      E: DeWitt Ross & Stevens
8000 Excelsior Drive, Su:
                                                                                                                            Cameron, Douglas C.
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Pred. No. 8.
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Suite 401
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; ORIGINAL SOURCE:
; ORGANISM: Vec:
US-08-801-344-2
                                                                                                US-09-498-599-2
                                                      Sequence 2, Application US/09498599 Patent No. 6303352 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 608-831-2106
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 4476 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: circular
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Best Local Similarity
Matches 349; Conserv
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APPLICATION NUMBER: US/08/801.344

FILING DATE:

CLASSIFT?
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APPLICANT: Cameron, Douglas C. APPLICANT: Shaw, Anita J. APPLICANT: Altaras, Nedim E. TITLE OF INVENTION: MICROBIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                1003
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COMPUTER: IE
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                                                                                                                                                                                                             aagcaacggcccggagggtggcgggcaggacgcccgccataaactgccaggcatcaaatt 1566
                                                                                                                                                                                                                                                                                                                                                                                                                                                          tgaaacgccgtagcgccgatggtagtgtggggtctcccccatgcgagagtagggaactgcc 1386
                                                                                                                                                                                                                                                                                                                                          ttgtcggtgaacgctctcctgagtaggacaaatccgccgggagcggatttgaacgttgcg 1506
                                                                                                                                                                                                                                                                                                                                                                                                  aggcatcaaataaaacgaaaggctcagtcgaaagactgggcctttcgttttatctgtttgt 1446
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                                                                                                                                                                                                                                                                                                                             TTGTCGGTGAACGCTCTCCTGAGTAGGACAAATCCGCCGGGAGCGGATTTGAACGTTGCG
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53717-1914
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 Nedim E.
MICROBIAL PRODUCTION OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18.6%;
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Pred. No. 3.4e-73;
0; Mismatches 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 4476;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 18.6%;
Best Local Similarity 92.8%;
Matches 349; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 608-831-2106 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                1507
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ORIGINAL SOURCE:
ORGANISM: Vec
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HYPOTHETICAL: N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 4476 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Sara, Charles S.
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: TELEPHONE: 608-831-2100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: NUMBER OF SEQUENCES:
                                                                         1003
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OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U.S.A. ZIP: 53717-1914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
TTTTCTAAATACATTC
                            atatctacaagccatc 1642
                                                                                        aagcagaaggccatcctgacggatggcctttttgcgtttttacaaaactcttcctgtcgtc 1626
                                                                                                                                                           aagcaacggcccggagggtggcgggcaggacgcccgccataaactgccaggcatcaaatt 1566
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                                                                         AAGCAGAAGGCCATCCTGACGGATGGCCTTTTTGCGTTTCTACAAACTCTTTTTGTTTAT
                                                                                                                                            AAGCAACGGCCCGGAGGGTGGCGGGCAGGACGCCCGCCATAAACTGCCAGGCATCAAATT
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 1078
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 332.8; DB 4;
Pred. No. 3.4e-73;
- ""matches 27;
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Gaps

0

1002

942

882

822

Job time: 13787 sec